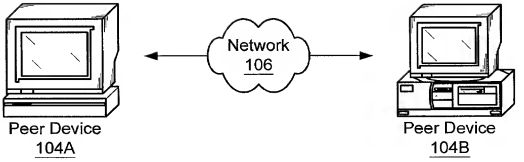

FIG. 1A

20080220:582220001

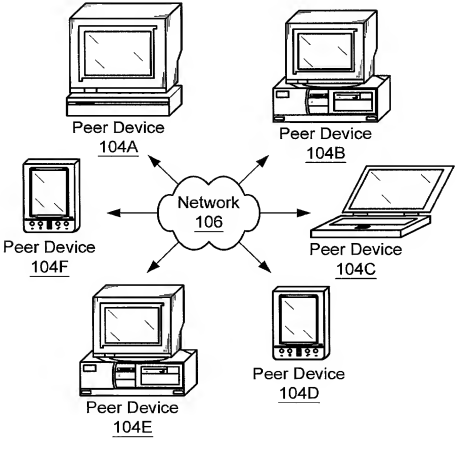

FIG. 1B

205220 '58E2800T

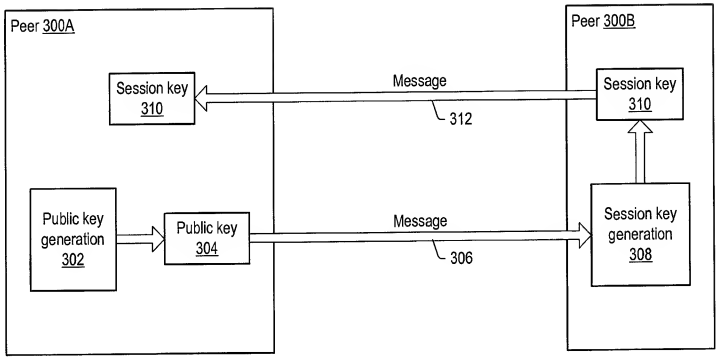

FIG. 2

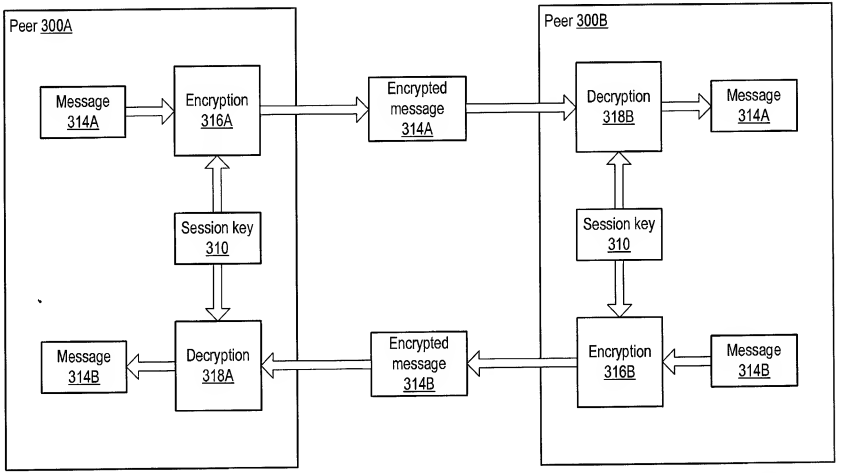
Peer 300A
Message 314A
Encryption 316A
Session key 310
Message 314B
Decryption 318A
Encrypted message 314A
Encrypted message 314B
Peer 300B
Decryption 318B
Message 314A
Session key 310
Encryption 316B
Message 314B

FIG. 3

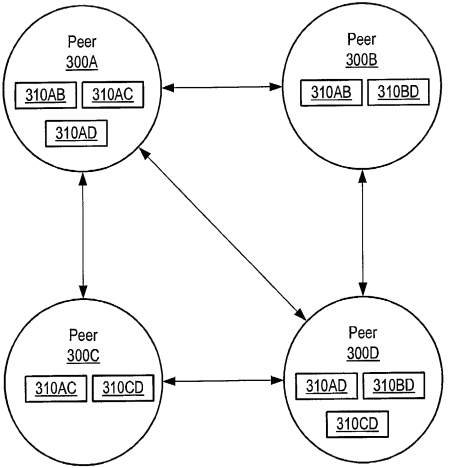
Peer
300A
310AB
310AC
310AD
Peer
300B
310AB
310BD
Peer
300C
310AC
310CD
Peer
300D
310AD
310BD
310CD

FIG. 4

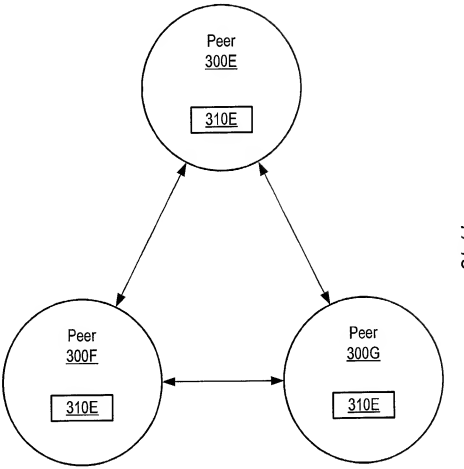
Peer
300E
310E
Peer
300F
310E
Peer
300G
310E

FIG. 5

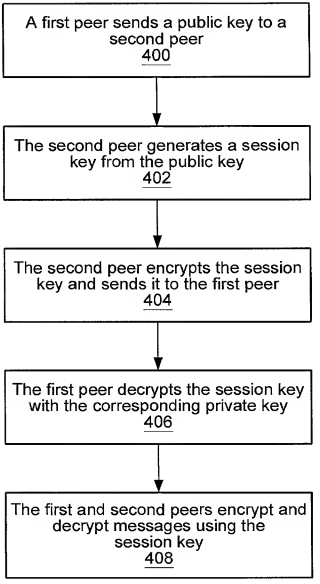

FIG. 6

20220-58E2907

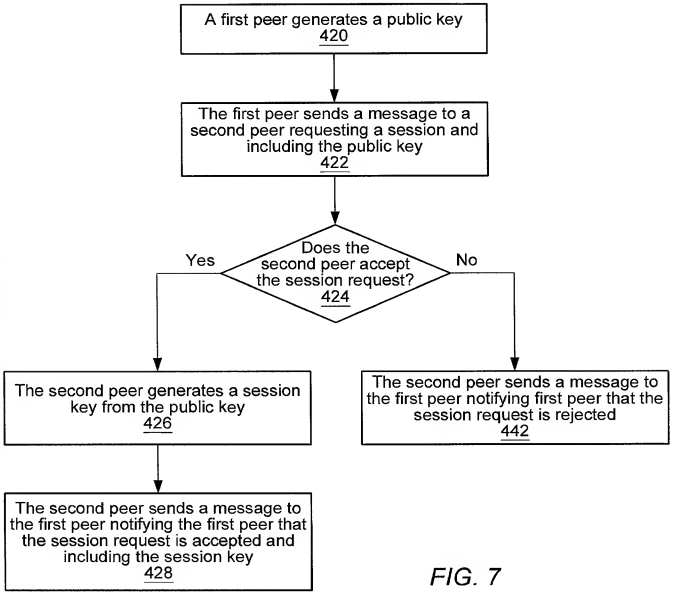

FIG. 7

20070208.1638.2800.1

23320.5620CIP1

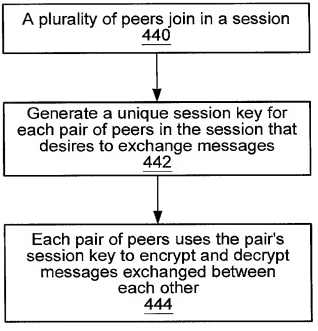

FIG. 8

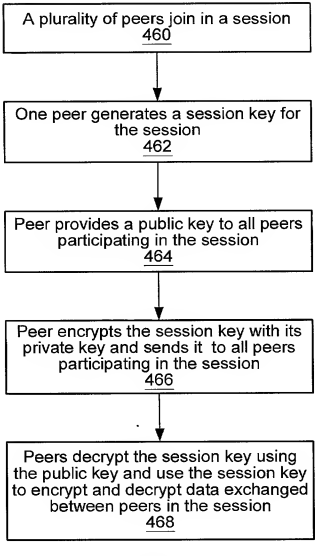

FIG. 9

205220 58E2800T

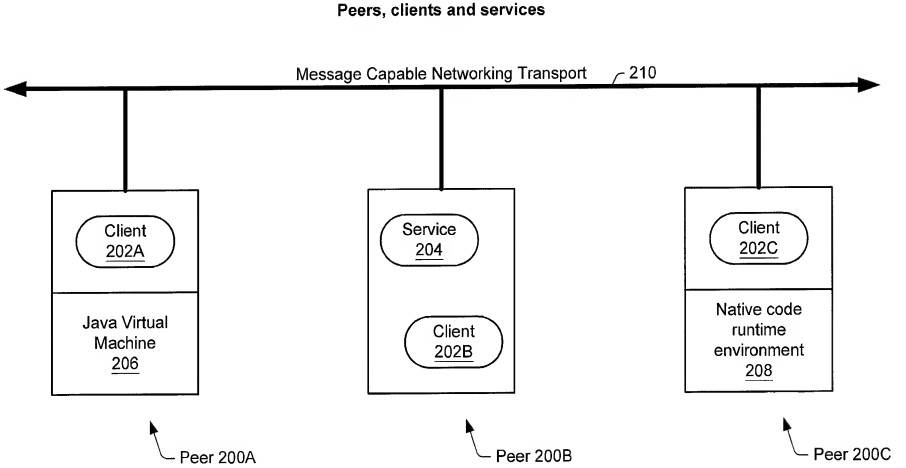

FIG. 10

20020220 "58E2801

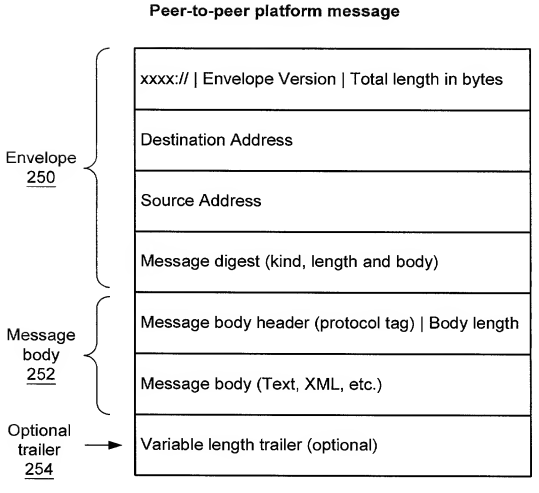

FIG. 11

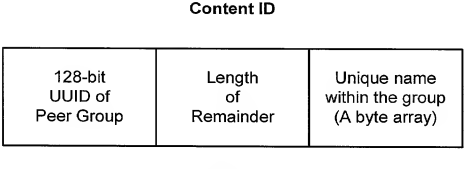

FIG. 12

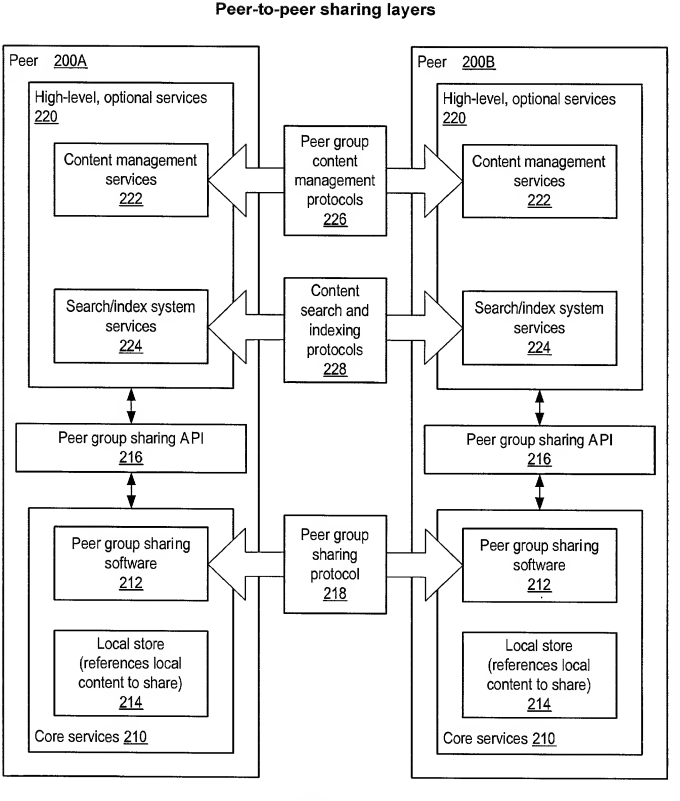
Peer-to-peer sharing layers
Peer 200A
High-level, optional services 220
Content management services 222
Search/index system services 224
Peer group sharing API 216
Peer group sharing software 212
Local store (references local content to share) 214
Core services 210
Peer group content management protocols 226
Content search and indexing protocols 228
Peer group sharing protocol 218
Peer 200B
High-level, optional services 220
Content management services 222
Search/index system services 224
Peer group sharing API 216
Peer group sharing software 212
Local store (references local content to share) 214
Core services 210

FIG. 13

Policy Advertisement

Element Name (A String)	Element Value Type
Policy Name	A non-canonical resource name (suitable for UI display)
Policy Keywords	String[]
Policy Resolver	<Peer Endpoint> to which the query generation and resolve messages are to be sent

FIG. 14

20220-5832001

Peer Advertisement

Element Name (A String)	Element Value Type
Peer Endpoint	<Peer Endpoint[]>

FIG. 15

Peer Group Advertisement

Element Name (A String)	Element Value Type
Membership Application Policy	<Policy Advertisement>
New Member Approval Policy (Authentication)	<Policy Advertisement>
Content Sharing Policy	<Policy Advertisement>
Peer Discovery Policy	<Policy Advertisement>
Policy Resolver Policy	<Policy Advertisement>
Pipe Resolver Policy	<Policy Advertisement>

FIG. 16

Pipe Advertisement

Element Name (A String)	Element Value Type
Direction	<Pipe Direction> (In or Out)

FIG. 17

Service Advertisement

Element Name (A String)	Element Value Type
Access Policy	<Policy Advertisement>

FIG. 18

Content Advertisement

Element Name (A String)	Element Value Type
Type (Optional)	String
Size (Required)	Long
Encoding (Required)	<By Value> or <By Reference>
Content ID (Required)	<Content ID>
About ID (Optional)	<Content ID>
Peer ID (Optional)	<Peer Advertisement>

FIG. 19

20070220-US2280T

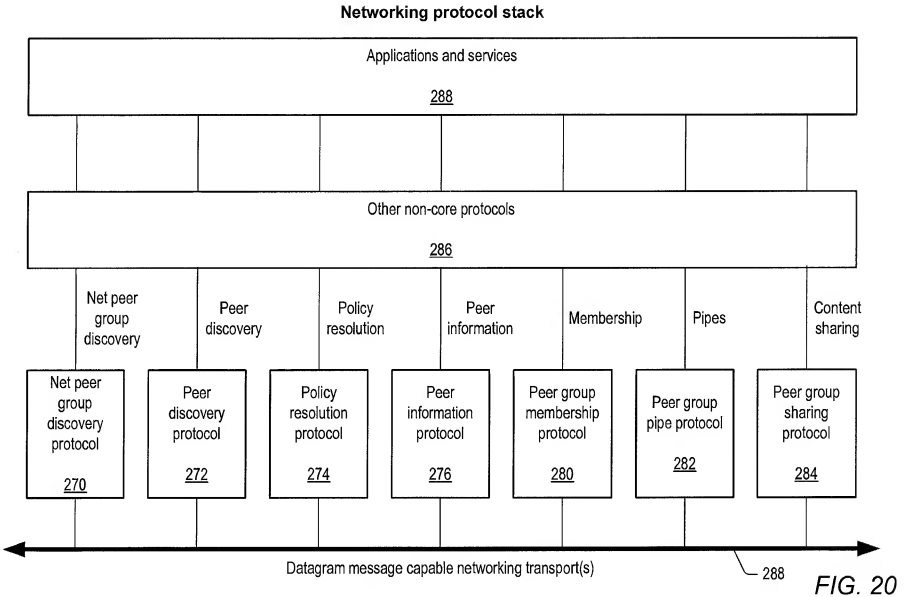
Networking protocol stack
Applications and services
288
Other non-core protocols
286
Net peer group discovery
Peer discovery
Policy resolution
Peer information
Membership
Pipes
Content sharing
Net peer group discovery protocol
270
Peer discovery protocol
272
Policy resolution protocol
274
Peer information protocol
276
Peer group membership protocol
280
Peer group pipe protocol
282
Peer group sharing protocol
284
Datagram message capable networking transport(s)
288

FIG. 20